

AMENDMENTS TO THE CLAIMS

Please amend claims 1, 3, 4, 6-8, 13 and 15-16, and cancel claims 2, 9 and 17-26, as set forth in the listing of claims that follows:

1. (Currently Amended) A method for making a diesel particulate filter catalytic element, comprising:

providing a wall-flow substrate comprising an inlet channel and an outlet channel and a porous wall separating the inlet channel and the outlet channel, said porous wall comprising an inlet wall surface adjacent the inlet channel and an outlet wall surface adjacent the outlet channel, said wall-flow substrate being characterized by a thickness between the inlet wall surface and the outlet wall surface and an average pore size between 5 micrometers and 500 micrometers;

forming a first slurry of a promoter oxide precursor and a refractory inorganic oxide;

calcining the first slurry to form a supported promoter;

combining a noble metal solution and the supported promoter to form a second slurry;

calcining the second slurry to form a catalyst composition, said catalyst composition having an average particle diameter of about 2 micrometers to about 10 micrometers, wherein the particle size is about 10% to about 80% of the average pore

size;

applying the catalyst composition to the inlet wall surface of the wall-flow
a substrate and not to the outlet wall surface; and

calcining the substrate to form the catalytic element, wherein the catalyst
composition penetrates less than or equal to about 25% of the thickness of the porous
wall.

2. (Cancelled)

3. (Currently Amended) The method of Claim 2, wherein the average
composition particle size is about 20% to about 50% of the substrate average pore size.

4. (Currently Amended) The method of Claim 3, wherein the average
composition particle size is about 25% to about 35% of the substrate average pore size.

5. (Original) The method of Claim 1, wherein the catalyst composition
loading is about 1.2 g/L of substrate volume to about 122 g/L of substrate volume.

6. (Currently Amended) The method of Claim 1, wherein the diesel particulate filter catalytic element has less than or equal to an about 15°C increase in a balance point temperature after aging at 650°C for 50 hours.

7. (Currently Amended) The method of Claim 1, wherein the diesel particulate filter catalytic element has less than or equal to an about 35°C increase in a balance point temperature after aging at 700°C for 16 hours in 10% steam.

8. (Currently Amended) The method of Claim 1, wherein the diesel particulate filter catalytic element has less than or equal to an about 70°C increase in a balance point temperature after aging at 800°C for 25 hours in 10% steam.

9-12. (Canceled)

13. (Currently Amended) The method of Claim 1, wherein the second noble metal slurry comprises a noble metal selected from the group consisting of platinum, palladium, and a combination comprising at least one of the foregoing noble metals.

14. (Original) The method of Claim 13, wherein the promoter oxide precursor comprises an element selected from the group consisting of vanadium, chromium, manganese, iron, cobalt, copper, zinc, nickel, lanthanum, cerium, praseodymium, neodymium, promethium, samarium, europium, gadolinium, terbium, dysprosium, holmium, erbium, thulium, ytterbium, and a combination comprising at least one of the foregoing elements.

15. (Currently Amended) The method of Claim 14, wherein the refractory inorganic oxide component is selected from the group consisting of aluminum oxide, doped aluminum oxide, titanium oxide, zirconium oxide, and a combination comprising at least one of the foregoing refractory inorganic oxide components.

16. (Currently Amended) The method of Claim 15, wherein the refractory inorganic oxide component is selected from the group consisting of delta aluminum oxide, silica doped aluminum oxide, lanthanum doped aluminum oxide, and a combination comprising at least one of the foregoing refractory inorganic oxide components.

17-26. (Cancelled)